

IN THE CLAIMS

Please add the following new claims:

Sub B  
37. (New) A system for communicating traffic between elements in a telecommunications node, comprising:

a computer-readable medium; and  
software stored on the computer-readable medium, the software operable to repeat a frame at a defined interval on a synchronous bus, to provide a plurality of service channels in each frame, to transmit in at least one frame traffic for a DS-0 connection in a single service channel, to transmit in the frame an asynchronous transfer mode (ATM) cell in a set of service channels, and to synchronously switch DS-0 traffic and ATM cells received in a frame.

38. (New) The system of Claim 37, wherein the service channel is two bytes in size, the software operable to repeat the frame at 125 microsecond intervals.

39. (New) The system of Claim 37, wherein the synchronous bus comprises a point-to-point link, the software further operable to repeat the frame at a defined interval on the point-to-point link.

40. (New) The system of Claim 37, the software further operable to transmit in-band a current channel associated signaling (CAS) value for the DS-0 connection in the service channel for the DS-0 connection.

41. (New) The system of Claim 37, the software further operable to transmit the ATM cell in a block of contiguous service channels.

42. (New) The system of Claim 37, the software further operable to transmit traffic for an integrated services digital network (ISDN) connection in a second set of service channels of the frame.

43. (New) A traffic processor for a line card of a telecommunications node, comprising:

a computer-readable medium; and

software stored on the computer-readable medium, the software operable to generate a frame comprising a plurality of service channels and an overhead portion having an internode communication channel in a service traffic portion to generate control traffic destined for a disparate element in the telecommunications node, to insert the control traffic into a slot in the internode communication channel associated with the disparate element, to insert traffic received at a port into the service channels, and to transmit the frame on a point-to-point link of a synchronous bus.

44. (New) The traffic processor of Claim 43, the software further operable to insert synchronous and asynchronous traffic into the service channels.

45. (New) The traffic processor of Claim 43, the software further operable to insert DS-0 traffic and a current channel associated signaling (CAS) value for the DS-0 traffic into a service channel.

46. (New) The traffic processor of Claim 43, the software further operable to insert an asynchronous transfer